



PATENT  
Docket No. SPLX.P0081

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Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 24, 2004.

Mani Adeli

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the application of:

Steven Teig

Serial No.: 10/076,121

Filing Date: 2/12/2002

For: METHOD AND APPARATUS FOR  
GENERATING MULTI-LAYER ROUTES

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to

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the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

This Information Disclosure Statement is submitted after receipt of a first Office Action on the merits but before the Final Office Action. Accordingly, a fee is required. The requisite fee is attached.

However, in the unlikely event that the Patent Office determines that additional fees, extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-1128** referencing SPLX.P0081. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: March 24, 2004

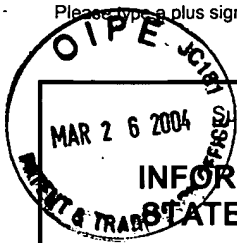
Respectfully submitted,

By: \_\_\_\_\_

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet				1	of	13	Application Number	10/076,121
							Filing Date	2/12/02
							First Named Inventor	Steven Teig
							Group Art Unit	Do, Thuan
							Examiner Name	2825
							Attorney Docket Number	SPLX.P0081

**U.S. PATENT DOCUMENTS**

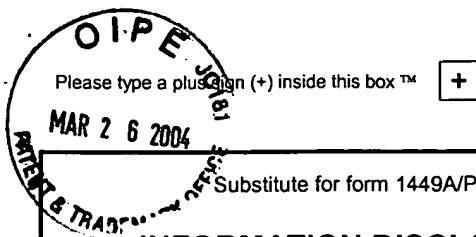
Examiner* Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Kind Code <sup>2</sup> (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	2002/010009	A1	07-25-2002	Xing et al.	
	2.	2002/0104061	A1	08-01-2002	Xing et al.	
	3.	2002/0107711	A1	08-08-2002	Xing et al.	
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	19.	6,546,540	B1	04-08-2003	Igarashi et al.	
	20.	6,645,842	B2	11-11-2003	Igarashi et al.	

Examiner Signature	Date Considered
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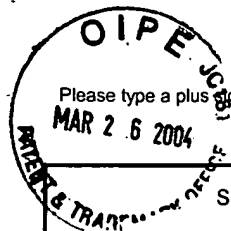
<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Application Number</b>	10/076,121
				<b>Filing Date</b>	2/12/02
				<b>First Named Inventor</b>	Steven Teig
				<b>Group Art Unit</b>	Do, Thuan
				<b>Examiner Name</b>	2825
<b>Sheet</b>	2	<b>of</b>	13	<b>Attorney Docket Number</b>	SPLX.P0081

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	10/076,121
Filing Date	2/12/02
First Named Inventor	Steven Teig
Group Art Unit	Do, Thuan
Examiner Name	2825
Attorney Docket Number	SPLX.P0081

Sheet

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of

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### U.S. PATENT DOCUMENTS

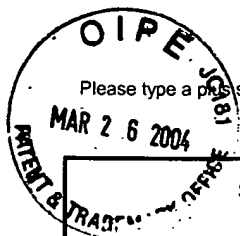
	42.	5,757,089		05-26-1998	Ishizuka	
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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Application Number</b>	10/076,121
				<b>Filing Date</b>	2/12/02
				<b>First Named Inventor</b>	Steven Teig
				<b>Group Art Unit</b>	Do, Thuan
				<b>Examiner Name</b>	2825
<b>Sheet</b>	4	<b>of</b>	13	<b>Attorney Docket Number</b>	SPLX.P0081

### U.S. PATENT DOCUMENTS

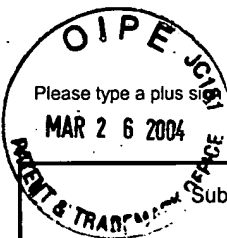
	66.	6,209,123	B1	03-27-2001	Maziasz et al.	
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	68.	6,219,832	B1	04-17-2001	Buzbee	
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### U.S. PATENT DOCUMENTS

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	97.	6,567,967	B2	05-20-2003	Greidinger et al.	
	98.	6,586,281	B1	07-01-2003	Gabara et al.	
	99.	6,615,400	B1	09-02-2003	Lukanc	

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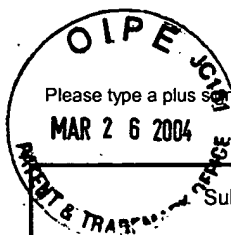
Examiner's Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code (if known) <sup>5</sup>				
	100.	JP	11-296560		10-29-1999	Matsumoto et al.	with English translation of Abstract;	
	101.	JP	2000-082743	A	03-21-2000	Igarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	102.	JP	64-15947		01-19-1989	Ouchi	with English translation of Abstract;	
	103.	JP	03-173471		07-26-1991	Tawada et al.	with Japanese Patent Office's English translation of Abstract; and with English	✓

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Sheet	6	of	13
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### FOREIGN PATENT DOCUMENTS

						translation of the application.	
	104.	JP	04-000677		01-06-1992	Fujiwara et al.	with English translation of Abstract;
	105.	JP	05-102305		04-23-1993	Sato	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
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	107.	JP	07-86407		03-31-1995	Miura	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
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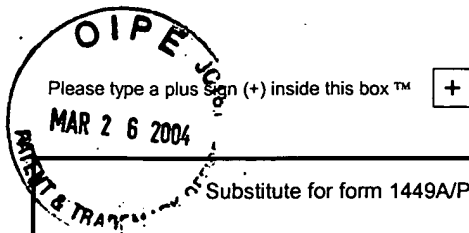
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				Filing Date	2/12/02
				First Named Inventor	Steven Teig
				Group Art Unit	Do, Thuan
				Examiner Name	2825
Sheet	7	of	13	Attorney Docket Number	SPLX.P0081

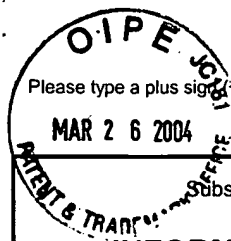
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Application Number	10/076,121		
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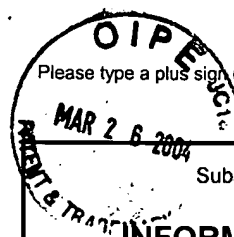
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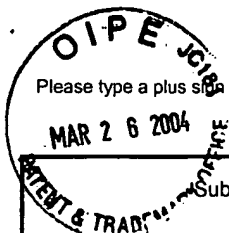
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First Named Inventor	Steven Teig		
Group Art Unit	Do, Thuan		
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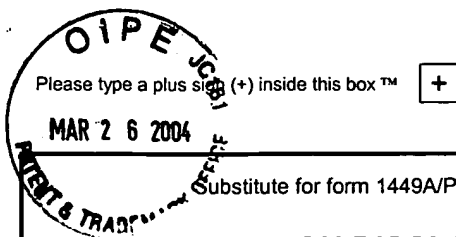
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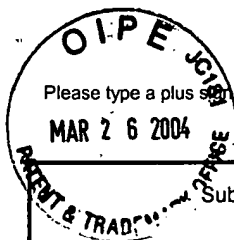
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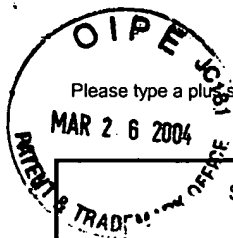
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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Application Number</b>	10/076,121
				<b>Filing Date</b>	2/12/02
				<b>First Named Inventor</b>	Steven Teig
				<b>Group Art Unit</b>	Do, Thuan
				<b>Examiner Name</b>	2825
<b>Sheet</b>	13	<b>of</b>	13	<b>Attorney Docket Number</b>	SPLX.P0081
<b>NON PATENT LITERATURE DOCUMENTS</b>					
	198.	Wang, D., Novel Routing Schemes for IC Layout, Part I: Two-Layer Channel Routing, 28 <sup>th</sup> ACM/IEEE Automation Conference, 1991, pp.49-53.			
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	201.	Zhou, H. et al., Optimal River Routing with Crosstalk Constraints, ACM Transactions on Design Automation of Electronic Systems, vol. 3, No. 3, July 1998, pp. 496-514.			

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	<b>Application Number</b>	10/076,121
	<b>Filing Date</b>	2/12/02
	<b>First Named Inventor</b>	Steven Teig
	<b>Group Art Unit</b>	2825
	<b>Examiner Name</b>	Do, Thuan
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